Nebraska Technology Trial—Questions About Testing with Chromebooks

DRC is pleased to be able to respond to some of the questions that have surfaced as we have released our Chromebook INSIGHT App to districts. We appreciate this trial period as a way to gain feedback and information regarding user experience about our product. This document is intended to address some of the initial questions we have heard from district users.

Background

Chromebooks can be a secure platform for administering student assessments. When set up properly, these devices meet K–12 education testing standards. If configured according to Google specifications, Chromebooks can be set to disable students' access to browse the web during an exam in addition to disabling external storage, screenshots, and the ability to print. Google provides three scenarios for setting up Chromebooks for secure assessment, detailed at the link below:

https://support.google.com/chrome/a/answer/3273084?hl=en&ref_topic=3273129

Q: Of the three secure testing scenarios provided by Google, which one did DRC select and why?

DRC developed the Chromebook INSIGHT application to meet the specifications of Google's Scenario 1 for delivery of secure assessments. Although each scenario prepares a Chromebook for secure testing, DRC selected Scenario 1—the student takes an exam on the Chromebook using the DRC INSIGHT App set up in Single App Kiosk mode. While the student tests, the INSIGHT App runs in a secure, full-screen mode. After the student exits the test, the Chromebook device can be used for any purpose, secure or otherwise—the Chromebook is only secured during testing with the DRC INSIGHT app.

Scenario 1

DRC specifically selected Scenario 1 because:

- It is the only scenario that allows for fully secure assessment delivery (Single Kiosk app)
- It allows the DRC INSIGHT App to communicate securely with the Testing Site Manager (TSM)
- It allows the student to easily use the Chromebook for other purposes when the INSIGHT App is not being used

Scenario 2

In contrast, Google's Scenario 2 includes a restricted sign in feature for secure assessment delivery, which assumes that the Chromebook will be used solely for testing purposes. When this feature is enabled, non-assessment sign on is not allowed. When this feature is not enabled, test administrators must maintain separate student profiles—assessment and non-assessment—to allow for additional restrictions needed during assessment sessions.

Scenario 2 requires a device wipe upon exiting the test and a higher level of administration oversight (for example, creating accounts twice). It also requires manual management of security permissions making it prone to user error that is difficult to detect. It also requires taking the test in the Chrome browser, or manually launching a non-kiosk application (essentially launching the user into a desktop session where they have access to one URL).

Scenario 3

In Scenario 3, Google's Public Session Kiosk mode is used to limit user access to non-assessment-related features of the Chrome OS operating system. Using Scenario 3 negates the possibility of TSM integration and secure content delivery due to known conflicts with Chrome packaged Apps.

Q: Does DRC require users to log in to each Chromebook and write down the device ID?

Not necessarily. There are two options for registering Chromebooks to use the DRC INSIGHT App:

- Use the DRC Device Toolkit to create one or more DRC ORG Units (with or without a TSM configured) and associate the Chromebook devices with an ORG Unit (this method requires the user to know the Chromebook's device ID). When the user starts the DRC INSIGHT App on the Chromebook, the Chromebook will be registered.

- Use the DRC Device Toolkit to create one or more DRC ORG Units (with or without a TSM configured). Then, start the DRC INSIGHT App on the Chromebook. The DRC INSIGHT App will request the user to register the device (the device ID will display) using the District, School, and ORG Unit drop-down menus that display.

Using the second method, no manual entry of the device ID is required, and regardless of method used, at any time the user can use the DRC Device Toolkit to associate a TSM with an ORG Unit, or to move registered Chromebook devices between DRC ORG Units.

One other related feature of the system is that the Readiness Check (available through a link on the portal page of the app once launched) displays the individual device id in the System information at the top of the page so that no confusion must be the result if the device ID is not properly recorded or is forgotten.

Q: Why does DRC require Google Apps for Education and the Google Administrator accounts?

DRC assumes that users have registered their Chromebooks as part of their initial implementation. Google specifies two additional "pre-requirements" for secure testing with any of the three scenarios:

- Get Chrome management for each Chrome device

- Enroll each device in the school's domain

Q: How is installing DRC INSIGHT different than installing other testing applications that districts may be using? (For example, Chromebooks with NWEA/MAPS testing.)

The DRC INSIGHT Chromebook App that is configured to be secure and deployed using Chrome device management, and configured to work with the TSM using the DRC Device Toolkit. For a different application, the process would not necessarily use a secure App or a TSM. These processes rely on Chromebook user account or other settings to restrict access. Since there is no secure testing App for the Chromebook, these processes require a workaround to secure the testing sessions.

Q: Does the deployment or installation of DRC INSIGHT require the Chromebooks to be dedicated to testing for the duration of the assessment window?

No, the Chromebook device is not dedicated to testing, the secure DRC INSIGHT App is. The DRC INSIGHT App is the secure testing environment and the student's test ticket is their access to this environment. After a student has finished a test and exits the DRC INSIGHT App, the student can execute other applications and use the Chromebook for other purposes. Test Administrators are responsible for monitoring testing and ensuring students are properly ending and submitting their tests.

Does Google provide a method to mass deploy secure testing configurations to Chromebooks?

As DRC understands it, Google is working on a feature to allow users to "push" a secure testing configuration using Chrome Management. Currently, Google's release timetable is unknown.